Clean Air Act Compliance Inspection Report

United States Environmental Protection Agency
Region 10 – Seattle, WA

Clean Air Act Partial Compliance Evaluation Inspection Report

East Side Plating, Inc.

Portland, Oregon

Inspection Date: July 13, 2022

ELIZABETH WALTERS

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Derrick Terada
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Attachments

1. Basic Facility and Inspection Information

Facility:	East Side Plating 8400 SE 26th Pl Portland, OR 97202
AFS/FRS Number:	110000487125
SIC:	3471 (Plating and Polishing)
NAICS:	332813 (Electroplating, plating, polishing, anodizing, and coloring)
Permit Number:	AQGP-026a (General Air Contaminant Discharge Permit for Plating and Polishing Operations) AQGP-002 (General Air Contaminant Discharge Permit for Decorative Chromium Electroplating Tanks) AQGP-029 (General Air Contaminant Discharge Permit for Small Metal Fabrication and Finishing Operations)
Facility Contacts:	Scott Henriksen Process Engineering/EHS Manager East Side Plating, Inc. scotth@eastsideplating.com
U.S. EPA Inspectors:	Elly Walters Air and Toxics Enforcement Section (ATES) Enforcement and Compliance Assurance Division (ECAD) U.S. EPA Region 10 1200 Sixth Ave. Seattle, WA 98101-3188 (206) 553-6317 walters.elizabeth@epa.gov Brendan Whyte Air and Toxics Enforcement Section (ATES) Enforcement and Compliance Assurance Division (ECAD) U.S. EPA Region 10 1200 Sixth Ave. Seattle, WA 98101-3188 (206) 553-1389 whyte.brendan@epa.gov
ODEQ Inspector:	Elaine Go Natural Source Specialist 3 elaine.go@deq.oregon.gov

Date of Inspection: July 13, 2022

Inspection Start/End Times: 9:00 AM to 1:30 PM

Inspection Notice: This was an unannounced inspection.

This was a multi-media Clean Air Act ("CAA") and Emergency Planning Community Right-to-Know Act ("EPCRA") Section 313 compliance inspection by the Environmental Protection Agency (EPA). Inspector Walters, EPA Region 10, led the CAA inspection and Inspector Whyte led the EPCRA Section 313 inspection. EPA Region 10 coordinated with the regulatory state air agency, Oregon Department of Environmental Quality ("ODEQ"), and Inspector Go participated in the inspection. The purpose was to identify potential compliance concerns with CAA regulations, specifically the National Emissions Standards for Hazardous Air Pollutants ("NESHAP") subpart WWWWWW ("6W") (Area Source Standards for Plating and Polishing Operations) and subpart N (Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks) as well as its CAA permits. This report only covers the CAA inspection.

Disclaimer

This report is a summary of observations and information gathered from the facility at the time of the inspection and from a subsequent records review. The information provided does not constitute a final decision on compliance with CAA regulations or applicable permits, nor is it meant to be a comprehensive summary of all activities and processes conducted at the facility.

1. Facility/Process Description

The following facility description is based on information provided by a facility representative in the opening conference as well as a written response by the facility to the records requests.

East Side Plating ("ESP") operates a plating and powder-coating facility located at 8400 SE 26th Pl in Portland, Oregon. ESP was originally incorporated in 1946 and purchased the 8400 SE 26th Pl location in the 1990's. The facility has approximately 108 to 122 employees. The 8400 SE 26th Pl location is comprised of three plants (i.e., each building is considered an individual plant); Plant 1, Plant 2 and Plant 3. Until recently, ESP also operated two additional plants (Plant 4 and Plant 5) at other locations in Portland. Plant 5 was recently sold in December of 2021 and Plant 4 is in the process of sale, according to facility representatives.

The plants at this facility each have dedicated processes: Plant 1 contains the conveyor powder-coating process, Plant 2 contains all plating processes, and Plant 3 contains the wash line,booth powder-coating, blasting, and finishing processes. The facility services metal manufacturers in Northwestern United States and coats/plates a diverse mixture of products, including dental equipment, automotive parts and light fixtures.

2. Compliance History

Based upon a review of the Detailed Facility Report in EPA's Enforcement and Compliance History Online ("ECHO") database, there did not appear to be any formal or informal CAA enforcement actions at the facility over the past 5 calendar years.

3. Inspection Elements/Order

a. Pre-Inspection Observations

Inspector Whyte and I went directly to the facility. We observed visible emissions from an open door on the north side of Plant 3 as we arrived.

b. Entry and Opening Conference

Inspector Whyte and I arrived in front of Plant 1 of the facility at approximately 9:00 AM on Wednesday, July 14, 2022. We met Inspector Go (ODEQ) in the parking area and then entered Plant 1 together. We were met by receptionists in the front office. We presented our inspector credentials, and I explained that Inspector Whyte, Inspector Go and myself were inspectors from U.S. EPA Region 10 and ODEQ and were conducting an unannounced CAA and EPCRA Section 313 inspection. I asked if I could speak to an environmental or operations manager. The receptionist contacted Scott Henriksen, Environmental Health and Safety Manager, and we met Mr. Henriksen in the front office. We introduced ourselves to Mr. Henriksen and we were escorted to the staff offices in Plant 3. We set up in an office and began the opening conference at approximately 9:10 AM. Inspector Whyte and I presented our inspector credentials to Mr. Henriksen.

I explained that Inspector Whyte and I were at the facility to conduct a CAA and EPCRA Section 313 inspection. I further explained that ODEQ was participating in the inspection as well. I explained EPA's confidential business information ("CBI") policy and presented the "General Notice Regarding Proprietary/Confidential Business Information (CBI) Submitted to or Collected by EPA in Connection with Inspections and Other Compliance Monitoring" document. Mr. Henriksen stated that customer parts and the facility layout were considered CBI by the facility. I explained that generally CAA inspections consist of a walkthrough and a review of records associated with air pollution emitting processes and the systems or work practices used to control emissions. I also noted that Inspector Whyte would most likely take photographs and videos of facility processes, and Inspector Whyte stated that he'd avoid including any customer parts in the photographs and videos.

During the opening conference, Mr. Henriksen provided an overview of the operations at the facility.

- Plant 1 contains the wash line and conveyor powder-coating processes. Parts are racked and are conveyed several enclosed spray booths that clean, prep and coat the coats. The parts are first conveyed through an alkaline cleaner (to clean), phosphoric acid (for surface treating), and finally a powder-coating. I asked Mr. Henriksen if the powder-coatings contained any metals and Mr. Henriksen replied that they can contain titanium dioxide, aluminum or zinc. I requested copies of all coatings used by ESP since January 1, 2019.

- Plant 2 contains all of the plating processes. The facility operates six plating lines. Lines 21 and 22 are auto-hoist lines and lines 24, 25, 26 and 28 are hand lines. Below is a list of tanks currently operated by ESP that are subject to NESHAP subparts N or 6W in each plating line. Subpart 6W affects plating and polishing tanks (as well as dry mechanical polishing or thermal spraying operations) that use or emit compounds of cadmium, chromium, lead, manganese, or nickel and subpart N affects hard chromium electroplating, decorative electroplating and chromium anodizing tanks (which are exempt from subpart 6W). The plating lines also have numerous other tanks for cleaning, surface treatment, or plating which are not subject to subpart N or 6W. See Table 1 below for a list of tanks, process type, hazardous air pollutant ("HAP") emitted/used, and wetting agents/fume suppressants or air pollution control devices if used.

Table 1: Plant 2 Subpart 6W and N Tanks

Tank ID #	Process Bath Name	Process Type	HAP Emitted/Used (Cd, Cr, Pb, Mn, Ni)	Wetting Agent/Fume Suppressant	Air Pollution Control Device
TS-2101D	Phosphate Sealer	Electroless	Cr (III)	No	No
TS-2102B	Clear Chromate	Electroless	Cr (III)	No	No
TS-2103	Yellow Chromate	Electroless	Cr (VI)	No	No
TS-2109B	Zinc Phosphate	Electroless	Ni	No	No
TS-2111	Trivalent Yellow Chromate	Electroless	Cr (III)	No	No
TS-2206	Bright Nickel	Electrolytic	Ni	Yes	No
TS-2210	Heavy Zinc Phosphate	Electroless	Ni	No	No
TS-2212	Clear Chromate	Electroless	Cr (III)	No	No
TS-2213	Trivalent Yellow Chromate	Electroless	Cr (III)	No	No

TS-2214C	Trivalent Black Chromate	Electroless	Cr (III)	No	No
TS-2215	Black Chromate	Electroless	Cr (VI)	No	No
TS-2216	Yellow Chromate	Electroless	Cr (VI)	No	No
TS-2504	Satin Nickel	Electrolytic	Ni	No	No
TS-2505	Satin Nickel	Electrolytic	Ni	No	No
TS-2506	Satin Nickel	Electrolytic	Ni	No	No
TS-2507	Bright Chrome	Electrolytic	Cr (VI)	Yes	No
TS-2509	Clear Chromate	Electroless	Cr (III)	No	No
TS-2510	Trivalent Yellow Chromate	Electroless	Cr (III)	No	No
TS-2801	Bright Chrome Dip	Electroless	Cr (VI)	No	No
TS-2816C	EN Bath	Electroless	Ni	No	Yes
TS-2817C	EN Bath	Electroless	Ni	No	Yes
TS-2818C	EN Bath	Electroless	Ni	No	Yes
TS-2819C	EN Bath	Electroless	Ni	No	Yes
TS-2820C	Teflon EN Bath	Electroless	Ni	No	No

TS-2821	Watts Nickel Strike	Electrolytic	Ni	No	No
TS-2831	EN Bath	Electroless	Ni	No	Yes
TS-2402	Passivate 400	Electroless	Cr (VI)	No	No
TS-2416B	Sulfamate Nickel	Electrolytic	Ni	No	No
TS-2417	Yellow Chromate	Electroless	Cr (VI)	No	No
TS-2619B	Bright Nickel	Electrolytic	Ni	Yes	No
TS-2620	Nickel Strike	Electrolytic	Ni	No	No
TS-2621B	Bright Chrome	Electrolytic	Cr (VI)	Yes	No
TS-2630	Semi-Bright Nickel	Electrolytic	Ni	Yes	No
TS-2631	Trivalent Chrome *(not in use)*	Electrolytic	Cr (III)	No	No
TS-2633	Semi-Bright Nickel	Electrolytic	Ni	Yes	No
TS-2634	Bright Nickel	Electrolytic	Ni	Yes	No

- Plant 3 contains the Phosphate Line 33 and powder-coating processes. Phosphate Line 33 contains an electroless chromate conversion coating tank and electroless plating tank which contains nickel. See Table 2 below for a list of tanks, process type, hazardous air pollutant ("HAP") emitted/used, and wetting agents/fume suppressants or air pollution control devices if used.

Table 2: Plant 3 Subpart 6W Tanks

Tank ID #	Process Bath Name	Process Type	HAP Emitted/Used (Cd, Cr, Pb, Mn, Ni)	Wetting Agent/Fume Suppressant	Air Pollution Control Device
TS-3302B	Clear Chromate	Electroless	Cr (III)	No	No
TS-3304	Zinc Phosphate	Electroless	Ni	No	No

I had some initial questions regarding how the facility complies with subpart 6W and N. We discussed the compliance standards of subpart N and I asked which emission limitation option the facility demonstrates compliance with. Mr. Henriksen explained that the facility operates decorative chromium electroplating tanks, uses wetting agents/fume suppressants, and demonstrates compliance with the surface tension emission limit not to exceed 33 dynes/cm as measured by a tensiometer at any time during tank operation. I noted that the facility had reported excess emissions to ODEQ on January 2, 2021. Mr. Henriksen explained that the surface tension measurement that triggered this exceedance was above the limit, due to the software transition to True Chem (a chemistry/coating management software) or possibly a bad grab sample. Mr. Henriksen noted that the facility complied with the emission limit the following week. I also asked to see a copy of the operation and maintenance ("O&M") plan as required by subpart N and Mr. Henriksen presented a hard copy of the O&M plan. Mr. Henriksen later provided an electronic copy of the O&M plan. I also requested a train diagram of the plating lines and Mr. Henriksen promptly provided a physical copy for our walkthrough.

We also discussed how the operators track pH and temperatures of the tanks. Mr. Henriksen explained that all plating baths are heated – chrome baths are heated to 100 to 120°F, other plating tanks are heated to approximately 80°F, and cleaning solutions are heated to 140 to 180°F. He also stated that pH and temperatures were tracked and logged by the operators. We then discussed air pollution control devices operated by ESP. Mr. Henriksen explained that the facility operates a dust collector for dry polishing processes, wet scrubber for the electroless nickel-plating tanks, and paper filters on powder-coating booths.

The opening conference concluded at approximately 9:50 AM.

4. Facility Walk-Through

Inspector Whyte, Go, and I were escorted by Mr. Henriksen during the facility walkthrough. We first walked over to Plant 1 and briefly met with Gary Rehnberg, President of ESP, in an office. Inspector Whyte and I gave an overview of the inspection and compliance process to Mr. Rehnberg, and he explained the operating history of ESP and its multiple locations in Portland (see Section 1). We also briefly discussed the facility's proposed source testing plan for the Cleaner Air Oregon ("CAO") risk assessment process. I was seated with a clear view of Plant 2

through the office windows and, during the discussion, I observed intermittent visible emissions from a rooftop stack. I shared my observations with Mr. Rehnberg and Mr. Henriksen and asked what was connected to the stack. They answered that the rooftop stack was above the burn-off oven. I noted that I'd like to see the burn-off oven during the walkthrough.

The walkthrough began at 10:30 AM. A digital photo log is Attachment 1 to this report.

Plant 1

Plant 1 contains the wash line and conveyor coating process. Mr. Henriksen walked us through the entire conveyor line. Parts arrive at a loading dock and are then racked onto the conveyor line. The conveyor line snakes through several booths. The conveyor line moves parts through the "Wash Line 15" booth, which has several stages with different sprays inside. First, the parts move through a soak cleaner spray and rinse. Next, the parts move through an iron phosphate spray for surface treatment. The parts are rinsed again and exit the "Wash Line 15" booth. We walked along the wash booth and were able to look inside at the rinse stages. I noted that I observed steam from the top and side doors of the washer.

The parts are then conveyed through a dry oven, in order to dry off the wash solution prior to powder coating. The parts are conveyed through two powder coating booths (only one booth was in operation during our walkthrough). Inspector Whyte, Go, and I observed two employees powder coating parts inside of the booth through an opened door (photo P7130202.jpg). The powder coating booth is equipped with wall filters – a pulse jet periodically knocks large particles off of the filters and the knocked-off material is later disposed of. Lastly, the coated parts are conveyed through the cure oven. The dry and cure ovens are both gas-fired. Mr. Henriksen stated that the cure oven exhausts through a rooftop stack and to atmosphere. Parts are then unracked and packaged in the packaging area.

Plant 2

We exited Plant 1 and walked across the facility lot to Plant 2. We entered a side door on the south-end of the building and then walked up onto a catwalk that overlooked the AZ Line 21 and CY Line 22 plating lines. I noted a strong acidic odor and experienced slight nasal irritation through our walkthrough of Plant 2. I observed continuous visible emissions from several of the tanks (cleaning, surface treatment and plating) and did not observe tank covers on tanks. I also observed a consistent haze in the room. I asked Mr. Henriksen if the facility had any tank covers available and Mr. Henriksen responded that it did not, because it would not be physically possible put a cover over a tank that was loaded with parts. Some tanks were visibly aerated as well. Mr. Henriksen explained that the air agitation provides mixing of tanks and dislodges gas bubbles that may form on plating surfaces of parts to prevent pitting.

Lines 21 and 22 are auto-hoist lines in which parts are loaded into rotating barrels and hoisted from tank to tank. We watched operators load and unload parts into tanks. I reviewed the train diagrams with Mr. Henriksen as we examined each plating line and discussed their contents (see Section 7 for contents of plating tanks subject to subpart 6W and N). We walked alongside Lines 21 and 22 towards Lines 24, 25, 26, and 28. These plating lines are hand lines, where parts are racked and placed into the tanks by hand. The plating lines are on an elevated grated platform with a collection basin underneath. I opted, and directed our group, to observe the plating lines

from the exterior versus walking through, due to the nasal irritation I was experiencing. We first observed Lines 24 and 26. I noted that there was standing liquid and a bucket of colored liquid in a sump area of Line 26 (see P7130212.MOV). I also observed residue and staining on a majority of the tanks, the grated floor, and various pieces of equipment. Again, I observed aeration of several tanks in Lines 24 and 26 and did not observe tank covers on tanks. There is a "V"-shaped vent hood that is positioned directly above the electrolytic "bright nickel" tanks (TS-2634 and TS-2619). The vent hood exhaust directly to atmosphere, according to Mr. Henriksen. We were also able to observe the electrolytic chromium-plating tank (TS-2621) from our position and I noted that it was loaded with parts and did not have a tank cover (see P7130217.JPG). The chromium-plating tank did not appear to be aerated. A door was also open to the outside, which is where Inspector Whyte and I had observed visible emissions from as I drove onto the facility (visible in P7130214.JPG).

We then walked to Line 28. The facility operates five electroless nickel-plating tanks, from which emissions are captured and routed to the "nickel scrubber" control device. We were escorted through Line 28 to the electroless nickel-plating tanks, that were not operating at the time, and examined the air pollution capture equipment. The capture equipment is a collection of three vent hoods: a rectangle-shaped hood with slitted intake vents positioned at the side of tanks TS-2819 and TS-2831 (see P7130220.JPG), a rectangle-shaped hood with grated intake vents positioned on the side of tanks TS-2817 and TS-2818, and another rectangle-shaped hood with grated intake vents (grates were removed) positioned on the side of tank TS-2816 (see P7130219.JPG). I noted a buildup of residue on the walls along the tanks. We also walked by an electrolytic nickel-plating tank (TS-2821) and I noted that the tank did not have a cover and was aerated. I also observed spills in the collection basin of Line 28.

We were able to see Line 25 from Line 28. However, I opted to not approach or walk-through Line 28 due to the nasal irritation I was experiencing and that there was an electrolytic chromium-plating tank. We then exit Plant 2 and walked to the northern exterior of the building. I observed continuous visible emissions from a roof exhaust fan on the side of the building (see P7130222.MOV). Mr. Henriksen and I briefly discussed the facility's proposed source testing plan for ODEQ CAO, specifically the logistics of setting up temporary stacks. Mr. Henriksen and I then entered an annex on the northside of Plant 1 which contained the "nickel scrubber" control device. The annex was very cramped with equipment, so I requested that Inspector Whyte and Inspector Go wait outside at this part of the walkthrough. Mr. Henriksen and I examined the control device ("EN Scrubber"), which is a wet scrubber according to Mr. Henriksen. I asked how the scrubber wastewater was managed and Mr. Henriksen responded that it was treated onsite prior to discharge.

Mr. Henriksen and I exited the annex and rejoined Inspector Whyte and Inspector Go, and then walked into Plant 2 and to the laboratory. We spoke about how the facility tends the plating tanks and demonstrates compliance with the subpart N emission limit (the facility has selected the surface tension compliance option), and Mr. Henriksen explained their process. The facility transitioned to True Chem, a laboratory software, in 2020 and records the surface tension measurements in True Chem. Prior to True Chem, the facility used paper reports and we viewed a few examples on a computer. I noted that 2 reports did not have surface tension measurements. Mr. Henriksen stated that the facility monitors surface tension of the subpart N tanks every 40

hours. The facility operates subpart N tanks, which are both decorative chrome-plating tanks, and uses a non-PFOS wetting agent. I asked Mr. Henriksen if the facility could pull a sample from a subpart N tank and take a surface tension measurement, and Mr. Henriksen contacted the facility's lab chemist Thomas Swan. While we waited for Mr. Swan, Mr. Henriksen and I discussed how often the subpart N tanks were cleaned and restarted. Mr. Henriksen explained that every 1 to 2 years the facility moves the tank solution into a holding tank while the plating tank is cleaned. However, according to Mr. Henriksen, the facility does not consider this a "restart" because the solution is never disposed of completely and is returned to the tank. Inspector Whyte then asked a few questions on the facility's TRI reporting, which is covered by the TRI inspection report. I requested the "tank recipes" for each tank (cleaning, surface treatment, and plating) and manufacturers' documentation for the tensiometer.

Mr. Swan arrived, grabbed a sample tube, and then left to retrieve a grab sample from tank TS-2621 ("bright chrome"). The laboratory has a window which overlooks the plating lines, so I was able to watch Mr. Swan walk to Line 26. Mr. Swan returned with the grab sample and loaded a sample on the sample table of the tensiometer. The facility uses a Fisher Scientific Fisher Surface Tensiometer Model 20. The tensiometer measures surface tension between a liquid and air, and readings are obtained from an upward pull through the sample. A duNouy ring, suspended from a counter-balanced lever arm, is placed below the liquid surface of the sample. The ring is pulled upward and the force necessary to pull the ring free is measured in dynes/cm and shown on a calibrated dial. The scale reading is the apparent surface tension. Inspector Whyte, Inspector Go and I watched as Mr. Swan operated the tensiometer and measured a surface tension of 25 dynes/cm. Mr. Swan then walked over to a computer and I observed Mr. Swan enter the result into True Chem. I requested records of all surface tension measurements for the chrome-plating tanks, and Mr. Swan sent to the data to my e-mail address right away.

We then walked into the storage/wastewater treatment area from the laboratory. Mr. Rehnberg joined us for this part of the walkthrough. The floor of the wastewater treatment area is grated, with a secondary containment below the grates. I noted the secondary containment below was sloshing with wastewater. I also observed a black residue of top of treatment tanks and containers, which Mr. Henriksen explained was carbon. Inspector Whyte and I also identified a boiler in this area (see photos P7130227.JPG, P7130228.JPG, P7130229.JPG and P7130230.JPG). The boiler is natural gas-fired, according to Mr. Henriksen. Mr. Rehnberg had to depart early and could not attend the closing conference, and so I was asked if I had any concerns at that time. I stated that I had not completed my walkthrough yet, but I had potential concerns with the plating lines' emissions. I explained to Mr. Rehnberg that I had observed emissions from tanks and a haze in the building, and that the exhaust fans did not seem to evacuate the building air sufficiently. I explained that plating facilities often have tank covers to minimize emissions, and that ESP may want to consider tank covers and/or wetting agents/fume suppressants if not already in use. Mr. Rehnberg and Mr. Henriksen stated that covers would not be feasible for tanks loaded with racks/barrels.

Plant 3

Mr. Henriksen escorted Inspector Whyte, Inspector Go, and I from Plant 2 to Plant 3. We walked through the "Polish Shop", which is where parts are polished via bead blasting or polishing lathes. The facility has two dust collectors to collect emissions from polishing processes. We

then walked into the powder coating area. The facility has four powder coating booths, of which three are spray booths and one is a conveyor booth. Parts are racked and powder-coated in the spray booths, and then transported into one of two cure ovens. The conveyor booth also conveys racked parts through a powder coating spray and then passes through a cure oven twice. There is also a "Magni Dip Spin" process, in which products are coated via a dip-spin application method and then dried in a flash oven. We observed operators actively coating parts in the booths and the "Magni Dip Spin" process in operation. We briefly observed Phosphate Line 33, which is a hand plating line for parts to be plated prior to coating.

We also inspected the burn-off oven, which was the source of the visible emissions I had observed during our discussion with Mr. Rehnberg in Plant 1. Mr. Henriksen explained that the burn-off oven is used to bake off excess powder from coated racks and hooks, and it is natural gas-fired. The burn-off oven runs on an eight-hour cycle and is cleaned every Friday. We briefly walked outside of Plant 3 to observe the burn-off oven's rooftop stack and I did not observe visible emissions at that time.

The walkthrough ended at approximately 12:55 PM.

5. Closing Conference

At 1:00 PM, our group returned to the staff office in Plant 2 to discuss the inspection and conduct the closing conference. I led the closing conference and summarized the parts of the facility we had visited during the inspection and our observations related to CAA. I went through my inspection notes and described potential compliance concerns from the inspection. The following were identified as potential CAA compliance concerns during the closing conference:

1. I observed visible emissions, generated by the plating processes, in Plant 2. I again expressed my concerns that the building exhaust fans did not appear to sufficiently evacuate the building air, that there was a lingering haze in the plating building, and that I had experienced a strong acidic odor and some nasal discomfort. I also noted the open door, leading directly outside, from which I observed visible emissions upon arrival and during our walkthrough. I explained the requirements of subpart 6W and subpart N, specifically work practices that minimize emissions. Mr. Henriksen stated that the facility currently uses fume suppressants/wetting agents in its tanks, and I stated that I would review the tank recipes and SDS's to confirm that. I again shared that, in my experience, other plating facilities utilize tank covers in addition to fume suppressants/wetting agents and I suggested that this facility may want to consider tank covers.

2. I also observed some poor housekeeping conditions in Plant 2. I stated that I had observed some spills and standing pools of tank solutions on the ground or in collection basins under plating lines. I also had observed a significant amount of residue on equipment and walls in Lines 24, 26 and 28. I stated that subpart 6W requires general good housekeeping and to minimize spills and overflow of tanks.

I explained to Mr. Henriksen that I would compile a list of CAA records and e-mail it once I had returned to the office[1] (see Attachment 2). I explained that the inspection would not be complete until I have reviewed all the records that the facility submitted, reviewed my notes, and written an inspection report. Inspector Whyte also shared his potential TRI compliance concerns and the TRI Records Request document, which is covered by the TRI inspection report. Inspector Whyte, Inspector Go and I departed the facility at 1:30 PM.

6. Post Inspection Activities

The facility provided a response to my follow-up information and document request on August 4, 2022. The list of requested records is Attachment 2 to this report. Following below is a summary of the records received from the facility, with my response for each record (see Table 1).

Table 3: Records Review

Permit Condition	Requirement	Records
AQGP-026a 5.1	Initial Notification (NESHAP Subpart 6W Initial Notification [40 CFR 63.11509])	NESHAP subpart 6W Initial Notification
Response: ESP provided a copy of the Initial Notification for NESHAP subpart 6W. The notification was submitted on June 23, 2010 and the facility stated that it was subject to 6W as an existing source.		
AQGP-026a 5.2	Notification of Compliance Status (NESHAP Subpart 6W Notification of Compliance Status [(40 CFR 63.11509(b))]	NESHAP subpart 6W Notification(s) of Compliance Status
Response: ESP provided a copy of the Notification of Compliance Status for NESHAP subpart 6W. The notification was submitted on October 17, 2014. Subpart 6W requires that if a facility makes a change to the affected sources, methods used to comply with this subpart, and capture and control equipment used to comply with this subpart, then an amended Notification of Compliance Status should be submitted within 30 days of the change. I reviewed the list of tanks subject to 6W in the Notification of Compliance Status and noted that a significant number of plating tanks, which emit or use a 6W HAP, are not listed. Tanks TS-2816C, TS-2817C, TS-2818C, TS-2819C and TS-2831 are vented to a control device (nickel scrubber), which is not marked on the Notification of Compliance Status as well.		
AQGP-002 7.2	Initial Notification of Affected Facility (NESHAP Subpart N Initial Notification [40 CFR 63.347(c)(1)])	NESHAP subpart N Initial Notification

[1] I transmitted the follow-up request on July 15, 2022 and the facility provided the records by August 4, 2022.

Response: ESP provided a copy of the Initial Notification for NESHAP subpart N. The notification was submitted on March 7, 1996. The facility listed a single affected tank – at that time, it appears this facility operated one electrolytic decorative chrome-plating tank.		
AQGP-002 7.4	Notification of Compliance Status (NESHAP Subpart N Notification of Compliance Status [40 CFR 63.347(e)])	NESHAP subpart N Notification(s) of Compliance Status
Response: ESP provided a copy of the Notification of Compliance Status for NESHAP subpart N. The notification was submitted on October 17, 2014. The facility listed two electrolytic decorative chrome-plating tanks. ESP certified the tanks' control techniques as wetting agents and surface tension measurement as the method to determine compliance, which is also I had observed on-site and in my records review. While I observed two electrolytic chrome-plating tanks in operation, the facility has a third chrome-plating tank (TS-2631) not currently in use. If the facility starts operation of TS-2631, then an amended Notification of Compliance Status should be submitted within 30 days.		
AQGP-002 4.3, 4.4	O&M Plan Requirement (NESHAP Subpart N [40 CFR 63.342(f)])	Chrome Line Bright Chrome Bath O&M Plan 2021
Response: ESP provided a copy of its Operation and Maintenance Plan. NESHAP subpart N requires that the owner or operator prepare an operation and maintenance plan, which should include the following: the operation and maintenance criteria for the affected source(s), the add-on air pollution control device (if used), and the process and control system monitoring equipment, and a standardized checklist to document the operation and maintenance of the equipment; procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions; and housekeeping procedures, as specified in Table 2 of subpart N. I reviewed the facility's Operation and Maintenance Plan, and it appears to incorporate the elements required.		
AQGP-002 6.3	Operation & Maintenance Plan (NESHAP Subpart N Recordkeeping Requirements [40 CFR 63.346(b)(5)])	Records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the Operation and Maintenance Plan and Table 2 of subpart N
Response: ESP was unable to provide complete records that demonstrate consistency with the provisions of the Operation and Maintenance Plan and Table 2 of subpart N, which covers housekeeping procedures. ESP was only able to provide related records from 2019. According to Mr. Henriksen, this type of recordkeeping has lapsed after a senior Waste Treatment Operator retired and that the facility's air permits do "not have a recordkeeping requirement to document the housekeeping activity."		

AQGP-026 3.3(c)(ii), 4.1(e); AQGP-002 6.7, 6.8	Fume Suppressant/Wetting Agents (NESHAP Subparts N and 6W Recordkeeping Requirements [40 CFR 63.346(b)(5); 40 CFR 63.11509(e)(3)])	Records of additions of fume suppressants/wetting agents added to subpart N and 6W process tanks from July 15, 2021 to July 15, 2022. Include times and quantity of fume suppressants/wetting agents added.
Response: ESP provided records of chemical additions of wetting agents to subpart N and 6W process tanks. Subparts N and 6W require operators or owners to maintain records for each applicable management practice and equipment standard, in order to show continuous compliance. According to ESP, chemical additions of wetting agents are made by routine maintenance additions conducted by production platers and by chemical add sheets generated by testing from laboratory analysis. ESP provides these records in its annual ACDP reports to ODEQ, and ESP submitted the 2019, 2020 and 2021 reports in response to this request. The reports include data of chemical additions for the electrolytic chrome-plating and electropolishing tanks but does not include data for the nickel-plating tanks. ESP instead provided a routine schedule of chemical additions to the nickel-plating tanks, where wetting agents are added on a weekly to monthly basis dependent on the tank type.		
AQGP-002 4.1(d)	General Compliance and Applicability Records	Records of maintenance activities on the air pollution control and monitoring equipment, such as work orders, from July 15, 2021 to July 15, 2022.
Response: ESP uses an Excel spreadsheet to track maintenance requests. ESP reviewed the maintenance request list and responded that it did not have any requests related to the EN Scrubber logged. According to ESP's Maintenance Mechanic, who monitors the EN Scrubber's operation, indicated that the only work performed on the scrubber system that he is aware of consists of a pump replacement approximately 5 years ago, replacing the fan bearings once, the motor bearings once, and the fan belts a couple of times. ESP states that no known records of these activities exist. Additionally, I requested the manufacturers' design specifications/operation manual for the EN Scrubber. However, I reviewed the manual and it appears to only include installation and maintenance instructions for a centrifugal exhaust fan. The documentation does not include recommended operating parameters for the scrubber.		
AQGP-002 6.5	Monitoring Data (NESHAP Subpart N [40 CFR 63.346(8)(b)])	Records of monitoring data to demonstrate compliance with subpart N emission limits

Response: Subpart N has multiple standards to demonstrate compliance with the chromium emission limit. ESP monitors and demonstrates compliance with the surface tension standard in which the owner or operator is not to exceed 33 dynes/cm as measured by a tensiometer at any time during tank operation. ESP is also required to keep records of monitoring data that are used to demonstrate compliance with the standard, including the date and time the data are collected. ESP was able to provide digital records, stored in True Chem, for Line 25 since November 8, 2021 and Line 26 since November 13, 2020. ESP was also able to provide scanned copies of the Lab Analysis Sheets prior to the implementation of the True Chem software in 2020. There were two exceedances in 2020 in the Bright Chrome bath, which occurred on November 25 and December 9. ESP attributed the exceedances to the transition to the True Chem software in November 2020 and that the notification instructions for surface tension were not created during the Bright Chrome bath set-up and the exceedances went unnoticed at the time of sample analysis. There also appears to be periods where the facility did not meet the required frequency of monitoring for wetting agents (permit condition 5.4(e)).		
AQGP-002 6.6	Operating Time (NESHAP Subpart N [40 CFR 63.346(8)(b)])	Records of total operating time (hours) and total active plating time (ampere-hours) of each affected source during the reporting period.
Response: The facility recorded and reported the total operating time (hours) and total active plating time (ampere-hours) in its annual reports for 2019 to 2021. ESP also provided its operating data for 2022 so far.		
N/A	NESHAP 6H Applicability (40 CFR 63.11170)	SDSs for coating operations from January 1, 2019 to July 15, 2022.
Response: I reviewed inventory spreadsheets provided by ESP and identified several coatings used by ESP from 2019 to 2022 that contained a metal HAP: RAL1023, NIC E Series Powder Coatings, NIC H Series Powder Coatings, NIC P Series Powder Coatings, and NIC U Series Powder Coatings. While NESHAP subpart HHHHHH ("6H") for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources is applicable to spray-applied coating operations that involve the spray application of coatings that contain compounds of chromium, lead, manganese, nickel, or cadmium, subpart 6H does not apply to surface coating applications using powder coating.		